ABSTRACT

Architecture and method for constructing Digital Chains of Trust for e-commerce comprising integrated, universal modeling, design and evaluation framework for building DCTs for e-Business Processes that provides creation, management, and preservation of legally admissible evidence of electronic events in transactions by employing object-oriented "Trust Building Blocks" having pre-defined functions, inter-connectivity protocols, real-time feedback features, decision support options, and trust standards. It employs an end-to-end design, operation, and audit framework: to identify the risk drivers; to establish the necessary trust standards to acceptably mitigate each risk; to ensure the legal enforceability of electronic acts; to generate forensic evidence; and to provide audit metrics for operational compliance. It provides independently verifiable, auditable, legally admissible evidence proving the sequence and nature of electronic events of: identity (who), content (what), time-of-event (when), enforceability (how each event transpired and its compliance to legislative and industry standards), and control of access to assure privacy and confidentiality.